Dot-EDU/Guatemala
Quarterly Report
April 2003 through June 2003

Using Information Communication Technology Applications to Support Intercultural Bilingual Education
In the Department of El Quiché, Guatemala

Leader Award No. GDG-A-00-01-00011-00
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I.   Introduction

The second quarter of 2003 was full of technical activities, with staff carrying out activities as specified in the project work plan. All of the centers were opened and fully equipped. Enlace staff had a strong presence in the centers and good remote support via telephone, e-mail and chats. Students, teachers, and other stakeholders received numerous trainings in technical and pedagogic areas. In addition, the project continued to have a strong presence nationally and internationally, with participation in press conferences, events, and meetings. Staff are also working to document products, processes, added-value, impact, and lessons learned, so that this information can be shared and applied in future projects. Challenges are ever-present and staff are working to overcome these and meet all expected results by the end of technical activities in November, 2003.

II.   Major Accomplishments

Result #1.1: Opening of seven new technology centers
- *Creation of new centers*: All centers are now fully equipped and functioning. This includes the seven new centers (CETEBIs) in high schools and community groups and the eight mini-centers (CETEBITOs) that have been opened in rural elementary schools in coordination with PAEBI. All of the CETEBIs have Internet connections by satellite, except the Joyabaj center which has a telephone connection. The 12 CETEBIs and 8 CETEBITOs are serving 2287 teachers in training, 1814 elementary students, over two hundred teachers, and many community members. Most of the new centers have organized inauguration events on their own initiative and have expressed their gratitude for the equipment, training, and technical assistance received. Other inaugurations are pending for July.

Result #1.2: Technical assistance to technology centers:

- *Training and support for CETEBIs*: During this quarter, Enlace technical staff have had a strong presence in the centers. Basic workshops on Internet use are being given to all teachers. Bilingual education with technology workshops are being given to student leaders. Enlace staff are coordinating materials creation projects with interested teachers. Enlace has promoted cultural festivals in the centers. These are being video-taped and in some cases are being used as a basis for materials creation projects. General technical and administrative support is given to the centers on an ongoing basis. A one-day training was given to all center administrators on trouble-shooting problems with the satellite Internet connections. All support has been focused on helping the centers become independent, rather than encouraging dependence on Enlace Quiché. The CETEBI model is become better and better articulated by more and more people in the region, which makes it more replicable.

- *Training and support for CETEBITOs*: Enlace was able to leverage much of the experience and model of the CETEBIs and the strong relation between PAEBI and the selected schools to get these centers up and running in a timely fashion. School representatives visited neighboring CETEBIs to see how electrical installations and furniture needs were handled. The communities participated actively in the centers. Administratively, Enlace and PAEBI staff worked with the center administrator, principal and community leaders to develop an administrative vision that will ensure the center's future. The Mayan concept of "yekb'äl" (roughly translates to "seed money") was used to convey the idea that the equipment and support being provided is intended to get these centers started. However, for them to prosper, the communities will have to work hard to make them grow. Technical training was provided in the basics of use to one teacher from each school (the administrator), with an emphasis on the use of the software developed by PAEBI and Enlace, Jun E'.

- *Training via New Horizons/Microsoft*: 75 participants, among students, teachers, administrators, and Enlace staff began receiving a series of weekend courses in Cunen, Santa Cruz and Santa Lucia. Despite some logistical problems, a recent monitoring visit reported that the courses are meeting New Horizons international standards and that the participants have been able to complete all coursework. This first phase will be finished at the end of July. Participants have expressed their gratitude for the opportunity to receive the courses and have a chance to "prove that they too are intellegent" (in hte words of Emilio Santay, a participating student. The final phase will be held in November.

Result #2.1: Revision, distribution, and application of LearnLink materials:

- *Reproduction of materials developed in the project's first phase:* PAEBI/World Learning/USAID has selected two books created in the teacher training schools during 2001 for use with third graders throughout the region. Enlace will give PAEBI the final layout in electronic format so that they can take out the Spanish, leaving only K'iche' and reproduce 5,250 copies of each book. The two selected books are "The blossoming of

our grandparents' words" from the Cunen and Joyabaj schools. Each is a collection of oral tradition compiled, rewritten, illustrated, and digitized by students in the teacher-training high schools and using the equipment provided by Enlace Quiché.

Result #2.2: Creation of materials in partnership with other local organizations:

- *STTA in instructional design and usability testing:* Helga Perez, of the Children and Technology Center of EDC, worked with Enlace staff all week in her specialty of instructional design. She gave an introductory workshop to all staff on the basics of instructional design and usability testing. She also worked with Mario Torres and partners on the designs of the ALMG, OKMA, and PAEBI materials. Usability testing of the portal also provided important insight into changes that could make the portal easier to use and help users find more resources. Most importantly, the staff, especially Mario, is now better prepared to do this type of testing without the need for STTA.

- *PAEBI's Interactive posters (Jun E'):* Helga Perez's visit included usability testing of the PAEBI software with first graders and teachers in the Chirij Tz'aq center, which showed that the children were quickly able to learn to use the software, despite never having used a computer before. Some recommendations were made and improvements are being made to the software to take these ideas into account.

- *OKMA's CD-ROM for training Mayan translators*: This project is approximately 70% complete. Enlace staff have given ongoing support. Helga Perez and Enlace staff spent a day working with OKMA on the graphic design and navigation system, recommending needed improvements.

- *ALMG's interactive CD-ROM for Mayan language literacy*: Enlace's materials coordinator has been providing direct follow up with the five ALMG communities. He has traveled to each community to provide technical assistance and keep the projects moving along. Helga Perez also offered important design and navigation recommendations which are now being taken into consideration.

Result #3.1: Creation of a bilingual education virtual community:

- *Portal usability testing*: A key component of Helga Perez's STTA was to lead Enlace staff through the process of usability testing for the web portal. This process pointed out many desirable changes to the portal that would make it easier to use and help users find information more quickly. During the next quarter, Enlace will make as many changes as feasible.
- *www.ebiguatemala.org:* The web portal is being used by a variety of students, teachers, and other professionals. The e-mail discussion list had a bit of activity during this quarter. As a depository for links, information and resources, the portal is beginning to serve an important role. However, much work is needed to foster an active virtual community (see challenges below.)

Result #3.2: Capacity-development in Quiché and neighboring regions:

- *Training:* Training continues to be the primary request from stakeholders and the focus of Enlace's activities. While much more training is needed in Quiché, it is satisfying to

see an increased level of capacity in the region, such that many teachers are now using e-mail and Internet and have at least basic computer literacy skills.

Result #3.3: Dialog with MOE and others to expand the use of ICTs and their integration into the educational system:

- Participation in CNEM and REDEIG processes: Enlace was chosen to participate in two important national initiatives. CNEM is developing an inter-institutional curriculum proposal for teacher training, as a successor to the "Malla curricular." Enlace's bilingual education specialist has been participating actively in the meetings and encouraging the idea that technology could be an important cross-cutting theme of the curriculum. The Rafael Landivar University invited Enlace Quiché to participate in a network of successful educational experiences (REDEIG). This activity will produce a systematic presentation of the successful and replicable elements of Enlace and other projects. In both cases, the education ministry is a key target of the results and a participant in the process.

- *Participation in Central American network to support ICTs in development*: Enlace project director was asked to participate in a three-day event in San Salvador to develop a virtual community of practitioners in the area. Important channels were opened for sharing resources between projects and countries and to better coordinate new projects. Enlace Quiche's experience with local content production and work with indigenous populations was cited as a model in those areas. The project director also gained new insights and contacts that will help strengthen Enlace's work.

- *Microsoft press conference*: On June 11, Microsoft hosted a press conference for 8 projects they are supporting, including Enlace Quiche. Enlace was represented by Mario Torres, two star students receiving Microsoft-sponsored training, and the PLO. They had a small booth with photos and a computer showing the Enlace materials. In Mario's words, Enlace "stole the show" by letting the press and other visitors get a direct look into Enlace's work. Eleuterio was also present at the event. A newspaper article (Prensa Libre, June 12, 2003, p. 23: "Software para organizaciones rurales") mentioned Enlace and one student appeared on a national TV news program.

Result #4 (internal): A well-administered project:

- *General project functioning*: In general, project activities continue smoothly, although there is a high level of pressure and some tension among staff. The project director and other key staff are working to ease tensions and keep the staff motivated to keep the project on track.

- *Enlace Quiché as a NGO*: With AED and USAID's blessing, Enlace Quiché has begun the process of converting itself into a Guatemalan NGO. This will allow Enlace Quiché to seek other funding sources to complement or replace USAID's funding and to develop creative partnerships and new activities to continue building on all that Enlace Quiché has started over the last three years. The organization will be based in Quiché, with local board members, including education leaders, many of whom are participating with the project already.

Monitoring and evaluation:

- *Mid-project monitoring and evaluation visit*: Sergio Cambronero and his assistant Ana Laura Murillo spent a busy week and a half with the Enlace team. They visited many of the centers and other activities, interviewing partners, education ministry officials, students, teachers, and Enlace staff. Sergio also led several sessions with project staff, including a 2 day retreat. He and Ana Laura got a lot of good video footage that will be useful in the final report and for dot-EDU's reports and materials. He also worked with the team on project advances and future plans. In general, he found that the project is moving forward well. However, there are some important issues regarding fragmentation in activities that need to be addressed. Also the project has moved from offering "supply" to being "demand-based" in some areas such as result 2 by creating materials with partners, but needs to focus on facilitating technology use rather than on providing technology. Further, staff need to focus more on the "value added" of their actions in planning and documenting, rather than just on process and product. In a final team meeting with the PLO, specific actions were identified to be implemented immediately to strengthen the project between now and the end of technical activities in November. Sergio's report and video highlights are forthcoming. Meanwhile, the project director has been working with key staff to follow up on the issues that arose during this visit.

- *Groove*: As part of Sergio's visit, the team settled once again on Groove as the repository for all important information relating to the project. Much information was updated and important documents attached to each activity. Staff will keep Groove more up to date and use the calendar. This will help internal organization and let other stakeholders have access to a wealth of details about the project.

- *Revision of work plan and M&E plan*: The coordinators and director did a revision of the M&E plan and work plan (in Groove) to ensure that we are on track to meet our results by year's end and we incorporated the findings of Sergio's M&E visit. In July, the director will summarize some proposed changes to the M&E plan and discuss this with USAID.

III.   Challenges

- *Donated computers from World Computer Exchange*: A large part of this quarter was invested in receiving, upgrading, and installing 237 computers donated by World Computer Exchange (37 of these computers were donated by PAEBI). These computers arrived in early April, by which time staff had already coordinated procedures for getting the computers upgraded and to the centers as quickly as possible. Thanks to a huge effort by technical, administrative, and support staff and help from volunteers from the centers, 190 of the computers were installed and in use after two months. However, it should be noted that only about 50 of the computers are relatively recent (less than four years old) and able to run Office 2000. The majority of the computers are four to six years old and limited to running Office 97. This means that there will be many support issues due to incompatibility and unavailability of parts. The project director has done a brief analysis

of the relative advantages and disadvantages of installing these computers instead of purchasing new equipment. In summary, Enlace invested over $28,000 in payment to WCE, shipping, parts purchase, and staff time, compared to $107,000 that new clones would have cost. Despite the short-term savings, the project director recommends that careful analysis be done before repeating this experience. When factoring in compatibility and support issues, years of productive use, beneficiary satisfaction, the project director believes that it would be better only to accept donations with high specifications or purchase new equipment.

- *Conflict of interests in Sacapulas*: The director of the Tujaal school and president of the community CETEBI committee has purchased computers and created a computer center for Tujaal students. This has reduced student attendance at the CETEBI and made it unclear as to his real motives. Enlace staff have been working to redefine the CETEBI's role in the educational community and restructure the committee so that the CETEBI truly serves both teacher-training high schools and other interested parties, without special interests. This process will continue in the upcoming quarter.

- *Building a virtual community*: Result 3.1 speaks of building a virtual community of bilingual education practitioners. While the web portal, www.ebiguatemala.org, provides an important tool for building the community, much work needs to be done. Teachers have limited opportunities to use the Internet and most are only now learning to use e-mail, chats, and other services. Building a strong virtual community will require more time and resources than the project has available. During the next quarter, the project will develop a strategy in coordination with USAID and other partners so that the virtual community will continue to grow after the current agreement ends.

- *Shortage of vehicles*: The project's two vehicles have not been adequate for the number of trips to the field, which frequently number three or even four on a given day. Public transportation is generally not viable due to schedules, routes, and the frequent need to transport equipment. The project has used personal vehicles and taxi services, but is concerned about the safety and reliability of these older model cars. To reduce risks and streamline logistics, the project has decided to rent a 4-door sedan for up to three months, while field visits are at their peak.

IV. Travel

Staff/consultants	Objective	Dates	Destination
Cynthia Castillo	Participate in regional meeting of somos@telecentros	April 8-12	Quito, Ecuador
Andy Lieberman	Participate in evnt: ICTs at the service of human development in Quiche	May 13-16	San Salvador, El Salvador
Sergio Cambronero and Ana Laura Murillo, NetAssessment	Mid-project monitoring and evaluation visit	May 28- June 6	Quiché and Sololá, Guatemala
Helga Perez, EDC	STTA in instructional design and	June 15-21	Quiché,

usability testing		Guatemala

V. Key Activities Planned for Next Quarter

- Continued visits to CETEBIs to help with technical and administrative issues and to ensure that materials creation projects are completed before the end of the school year and help control quality.
- Workshops on Internet as a teaching resource and start of building virtual communities with two groups of teachers: those that teach Mayan language and those that teach pedagogy, facilitated by Gabriela Alpirez.
- Workshops for parents groups and introductory computer use courses for selected parents.
- Continued support to CETEBITOs, including provision of additional educational software.
- Planning for an event in October to present materials created this year and many workshops in November.
- Finalization of materials creation projects with partners (ALMG, PAEBI, OKMA)
- Development of a transition strategy for the portal so that the virtual community can continue to grow.
- Continued participation in CNEM and REDEIG processes.
- Project director plans to travel to Washington, D.C. in August to work on planning issues with AED and EDC and to participate in the HCD USAID conference.
- Update of M&E plan to show changing indicators